Alan E. Humphrey Committee on Energy and Commerce July 7, 2016

Good afternoon Chairman Shimkus and members of the Committee. My name is Gene Humphrey, I am a business owner, member of Nevadans for Carbon-Free Energy and a private citizen from the State of Nevada. In 1998 I established International Test Solution, Inc. International Test Solutions is the global leader in advanced probe card, test socket, and frontend chamber cleaning solutions and is a key supplier to the top semiconductor worldwide. Although one hundred percent of our manufacturing is in the United States eighty-five percent of our sales are outside the United States. We maintain offices in Singapore, Taiwan, Japan, South Korea, China and Germany.

I grew up on a ranch near Cheyenne, Wyoming. In 1958 the Department of Defense built the Atlas ICBM facilities a few miles from our house. In next decades those facilities were replaced with Minuteman and Peacekeeper ICBM systems. With 200 missile silos spread across hundreds of miles of southeast Wyoming, western Nebraska and northern Colorado, the Defense Department crews are required to transport missiles and nuclear warheads regularly for maintenance on the roadways next to the ranch.

After graduation from high school I enlisted in the Army and proudly served two tours in Vietnam as a helicopter pilot in the 116th Assault Helicopter Company. After spending over nine months in the hospital recovering from wounds, I instructed in Cobra attack helicopters for a year teaching advanced tactics and gunnery.

It was only though the availability of the GI Bill that I was able to continue my education at the University of Wyoming earning a degree in Mechanical Engineering. After graduation in 1973 and with the oil embargo against the United States causing long gas lines and shortages of energy for the nation, I worked with several government agencies and teams to find alternative sources for energy that would reduce consumption or increase production. I primarily worked in the conversion of coal to gaseous fuels for Energy Research and Development Administration and then Department of Energy, Fossil Energy Division.

In 1987 I started my employment with the Department of Defense, Technical Engineering, located at Cheyenne, Wyoming. I had engineering responsibility for maintenance for Minuteman III and Peacekeeper weapon systems. During my ten years we moved hundreds of nuclear warheads to and from multiple locations for maintenance.

As a private citizen, I have never been able to understand the argument used to scare people about the transportation of spent nuclear reactor fuel. I have personally seen nuclear warheads transported near our ranch in Wyoming since 1958 and it continues even today. I would challenge this committee to present the argument of technological advances to protect the safety of the public.

The spent nuclear fuel is not WASTE. Long term storage of this material is NOT required. Modern technology with respect to reprocessing allows us to convert 94% of the spent nuclear

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fuel to productive use in generating electricity so that only 6% will need to be stored. Further technology developments will probably reduce the storage requirements even further.

In 2012, a poll was conducted by a respected pollster that asked Nevadans about how they felt about Yucca Mountain. 62% of Nevadans said we should open Yucca Mountain for the study of potential reprocessing of nuclear waste into usable energy because of the jobs and money such a project would bring into the state. The poll also indicates that despite the opposition of most political leaders in the state, the residents of Nevada realize that such a research park could create jobs, new industries and play an important role in the state's economy. The poll also disputes the notion that the closer you get to Yucca, the stronger the opposition. In fact, the poll shows just the opposite, with 75 percent of rural residents (primarily in the southern part of the state and Nye County where Yucca is located) supporting the opening of the site, with 17 percent opposed. In Clark County, 61 percent of residents support it, with 36 percent opposed. The results are similar to previous polls that have been conducted in the State since 2002 with virtually the same result.

Nevadans, in my personal opinion, want to have an honest conversation about Yucca Mountain and Nevada should have a seat at the table to discuss the potential economic opportunities.

Nevada is at a crossroads with economic diversification and Yucca mountain represents additional investment into the State without the need for the State of Nevada subsidies. The utilization of Yucca represents an import to the State of high paying professional jobs and would complement the recent renaissance that Nevada is appreciating with major technology companies choosing Nevada as their home. There is also an opportunity to develop a public private partnership with the Nevada Higher Education System leveraging the already existing expertise at the world renowned Desert Research Institute. The creation of a Nevada based Research Park, which could provide our researchers the opportunity to study clean technologies and the commercial application and drive down the amount of total nuclear energy that remains in the rods.

Nevada should identify the permanent funds that are attributable to Yucca Mountain and explore opportunities such as the Interstate 11 project. This Can-Mex interstate would only continue to support the infrastructure needs as our economy and trade between our countries thrive.

I feel strongly that Yucca is the national solution for this issue, and Nevada is at the precipice to begin working with the Federal Government to create investment to develop a nuclear repository and reprocessing solution. As a Nevada businessman I feel strongly that we need to begin conversations about how Nevada can be part of the energy solution and how business can help with the political discussion.